

## **BOW TYING LEARNING DEVICE**

### **Cross-Reference to Related Application**

[0001] This application is entitled to the benefit of, and claims priority to, provisional U.S. Patent Application Serial No. 60/417,955 filed October 11, 2002 and entitled "BOW TYING LEARNING DEVICE," the entirety of which is hereby incorporated by reference.

### **Field of the Invention**

[0002] The present invention relates generally to a method and apparatus for assisting children in learning how to tie shoestrings into a bow, and more particularly to a mechanical device which permits a child to easily go through the steps of tying a bow as part of a learning process.

### **Background of the Invention**

[0003] It is desirable for children to learn to tie their own shoes at the earliest age so that the child becomes more self-reliant, and parents and others are spared the chore of always having to tie the shoestrings for the children. However, because young children have limited manual dexterity, and because the steps required to tie a bow in a shoestring are somewhat difficult and confusing for a child, the time required to teach a child to tie a bow can be lengthy and difficult.

[0004] There are several known devices for assisting children in learning how to tie their shoestrings. The simplest known device is a printed poster, usually done with bright colors and drawings that are attractive to children, which set out in sequence each of the steps required to tie a bow. This solution to the problem however is generally inadequate because it fails to physically assist the child in learning to tie a bow.

[0005] It is also known to utilize an enlarged cover that the child can slide over his or her shoe, and this cover is provided with very large shoestrings which make shoe tying and lacing easier than the much smaller shoestrings found in a child's shoe. While this device does make it easier to teach lacing and tying of a shoestring, it still lacks any mechanical device for physically assisting a child in learning how to tie a bow in a shoestring.

### **Summary of the Invention**

[0006] Briefly summarized, the present invention includes a device for assisting and teaching a child to tie a bow in a shoestring. In the preferred embodiment of the invention, the device includes a base member; an extended string attached to the base member with the two ends thereof extending loosely from the base member; a holding member supported above the base member and having securing elements thereon spaced from one another and formed to temporarily hold the ends of the string in place thereat to permit the child to manipulate the string and form a bow in the string.

[0007] The base member may include two holes therethrough with the string being threaded through the holes so that the approximate center of the string is between the holes and the ends of the string extend away from the holes and have substantially equal lengths.

[0008] Each of the ends of the string may have first and second different colored indicators positioned thereon, respectively, at a predetermined distance from the base member corresponding generally to the distance between the base member and the securing elements, and the securing elements on the holding member may each have a different color that correspond, respectively, to the first and second color indicators on the ends of the strings. Also, one of the string ends may have a third colored indicator that is different from the first and second colored indicators, and that is located between one of the first or second colored indicators and the tip end of one of the ends of the string.

[0009] Preferably, a vertically extending post is removably mounted in the base member to extend upwardly therefrom, and the holding member is removably attached to the post, whereby all elements of the device can be easily assembled and disassembled.

[0010] The base member may include a drawing of a rabbit thereon, and the holes in the base member may be located where the ears of the rabbit should be located whereby the string, when tied in a bow, has the appearance of ears for the rabbit.

[0011] The present invention also includes a method of assisting and teaching a child to tie a bow in a shoestring which includes the steps of: placing two different color indicators on a length of string at predetermined locations along the length thereof; providing a base member for holding the string at the center portion of thereof so that the ends of the string can extend loosely from the base member; positioning two securing elements above the base member with each of the securing elements being colored to correspond to the color of one of the color indicators on the string, respectively;

temporarily securing one end of the string to one of the securing members so that the colored indicator on the end of the string is positioned adjacent the securing member of the same color; temporarily securing the other end of the string to the other one of the securing members so that the colored indicator on the other end of the string is positioned adjacent the other securing member of the same color; and manipulating the tip ends of both the ends of the string to form a bow in the string while the ends of the string are temporarily secured to the securing members.

### **Brief Description of the Drawings**

[0012] Fig. 1 is a perspective view of a preferred embodiment of the device of the present invention;

[0013] Fig. 2 is a view similar to Fig.1, and showing one of the steps for using the device to form a bow;

[0014] Fig. 3 is a view similar to Fig.1, and showing another of the steps for using the device to form a bow;

[0015] Fig. 4 is a view similar to Fig.1, and showing another of the steps for using the device to form a bow;

[0016] Fig. 5 is a view similar to Fig.1, and showing another of the steps for using the device to form a bow;

[0017] Fig. 6 is a view similar to Fig.1, and showing another of the steps for using the device to form a bow;

[0018] Fig. 7 is a view similar to Fig.1, and showing another of the steps for using the device to form a bow; and

[0019] Fig. 8 is a view similar to Fig.1, and showing another of the steps for using the device to form a bow.

### **Description of the Preferred embodiment**

[0020] Looking now in greater detail at the accompanying drawings, the preferred embodiment of the present invention is a device that includes a flat, preferably rectangular, base member 10 that can easily rest on any flat surface, and a post member 12 that is fitted in a hole in the base member 10 so as to extend vertically upwardly from the base member 10. A holding member 16 is mounted at the extending end of a rod 14 that extends horizontally between the post 12 and the holding member 16, whereby the

holding member is disposed above the base member 10. The holding member 16 has a vertically extending front face 18 that includes a first securing member 20 mounted on one side thereof, and a second securing member 22 mounted on the other side thereof. The securing members 20 and 22 are preferably a form of Velcro®, but they can be formed of any material that will temporarily hold a string in place during the bow tying procedure which will be discussed in greater detail below. Preferably, the first securing member 20 is made of a distinctive color, such as green, and the second securing member 22 is made from a different distinctive color, such as red.

[0021] A pair of openings 24 are formed in the base member 10 directly beneath the front face 18 of the holding member 16, and a string 26, which may any type of string but is preferably a conventional shoestring, is threaded downwardly through one of the holes 24 and then upwardly through the other hole 24 so that the center portion of the shoestring 26 forms a loop on the bottom surface of the base member 10 (shown in dotted lines in Fig. 1), and the two end portions 26' and 26'' of the shoestring extend loosely along the upper flat surface of the base member 10. The shoestring end 26' has a color-coded portion 28 which corresponds in color to the first securing member 20 (e.g. green), and a second color-coded portion 30 on the end 26'' of the shoestring that corresponds in color to the second securing member 22 (e.g. red). It is also to be noted that the length of the shoestring ends 26' and 26'' between the holes 24 and the first and second color coded sections 28, 30 correspond generally to the height of the first and second securing members 20, 22 above the top surface of the base member 10. The shoestring end 26'' may also be formed with a third color-coded section 32 that is located between the second color-coded section 30 and the tip end of the shoestring end 26'', and it is a different color (e.g. yellow) from the first and second color-coded sections 28, 30. This third color-coded section 32 can be used to assist in forming the bow, as will be explained in greater detail below.

[0022] By supporting the holding member 16 using the horizontally extending rod 14, adequate space is provided in front of the post 12 to let a child manipulate the shoestring in forming a bow as will be explained in greater detail below, but if desired the holding member 16 could be mounted directly to the post 12, or it could be supported above the base member 10 using any equivalent mounting structure.

[0023] In the preferred method of using the device of the present invention in teaching a child to tie a bow, the following steps can be taken, and for convenience of understanding

will be referred to as the green string and the red string to as the red string:

the green string 26' to the green securing member 26'' to the red securing member both the red and green strings hanging over the;

g 26'' to the right to go through the front and

to make the base of the bow (see Fig. 5);

to the first green securing member 20 with the triangular piece (see Fig. 6);

holding between the thumb and index finger the ends generally to the vertical height of the red string 26'' around the front of the green opening of the first loop in the green string

d string 26'' and push it through the loop in the cross-over portion of the red string 26''. For this color-coded section 30 which identifies the grasped in pushing it through the loop in the

26' and 26'' together to form the knotted bow

invention is the fact that the first and second temporarily hold the ends 26' and 26'' of the any assistance from the child while the child is using as described above. Thus, the device of use, provide a significantly improved a bow in a shoestring.

essential invention, the post 12 can be removed from the rod 14 may be removable from the post 12, and from the rod 14 so that all of these separate

[0026] It will therefore be readily understood by those persons skilled in the art that the present invention is susceptible of broad utility and application. Many embodiments and adaptations of the present invention other than those herein described, as well as many variations, modifications and equivalent arrangements, will be apparent from or reasonably suggested by the present invention and the foregoing description thereof, without departing from the substance or scope of the present invention. Accordingly, while the present invention has been described herein in detail in relation to its preferred embodiments, it is to be understood that this disclosure is only illustrative and exemplary of the present invention and is made merely for purposes of providing a full and enabling disclosure of the invention. The foregoing disclosure is not intended or to be construed to limit the present invention or otherwise to exclude any such other embodiments, adaptations, variations, modifications and equivalent arrangements, the present invention being limited only by the claims appended hereto and the equivalents thereof.